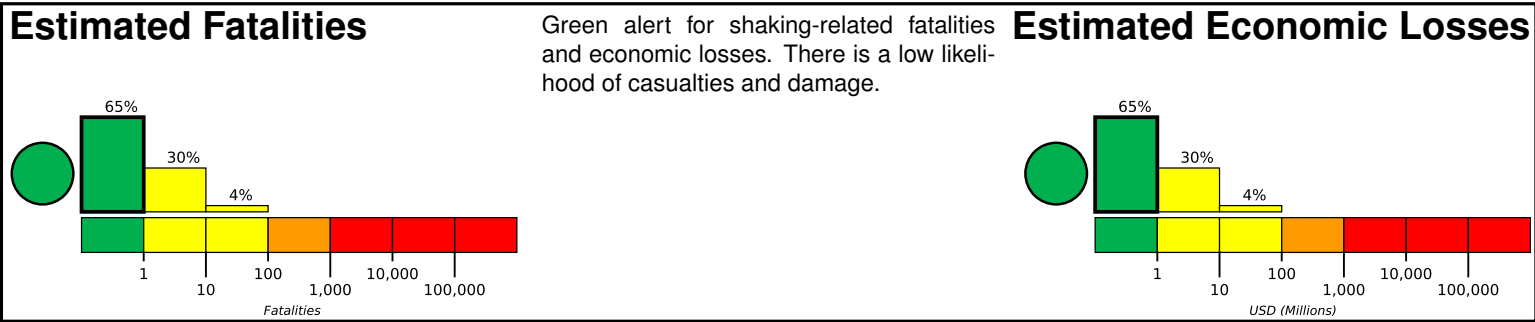


M 4.0, 14 km SSW of Westley, CA
Origin Time: 2023-09-19 00:15:32 UTC (Mon 17:15:32 local)
Location: 37.4453° N 121.2467° W Depth: 5.0 km

PAGER Version 1

Created: 4 weeks, 0 days after earthquake

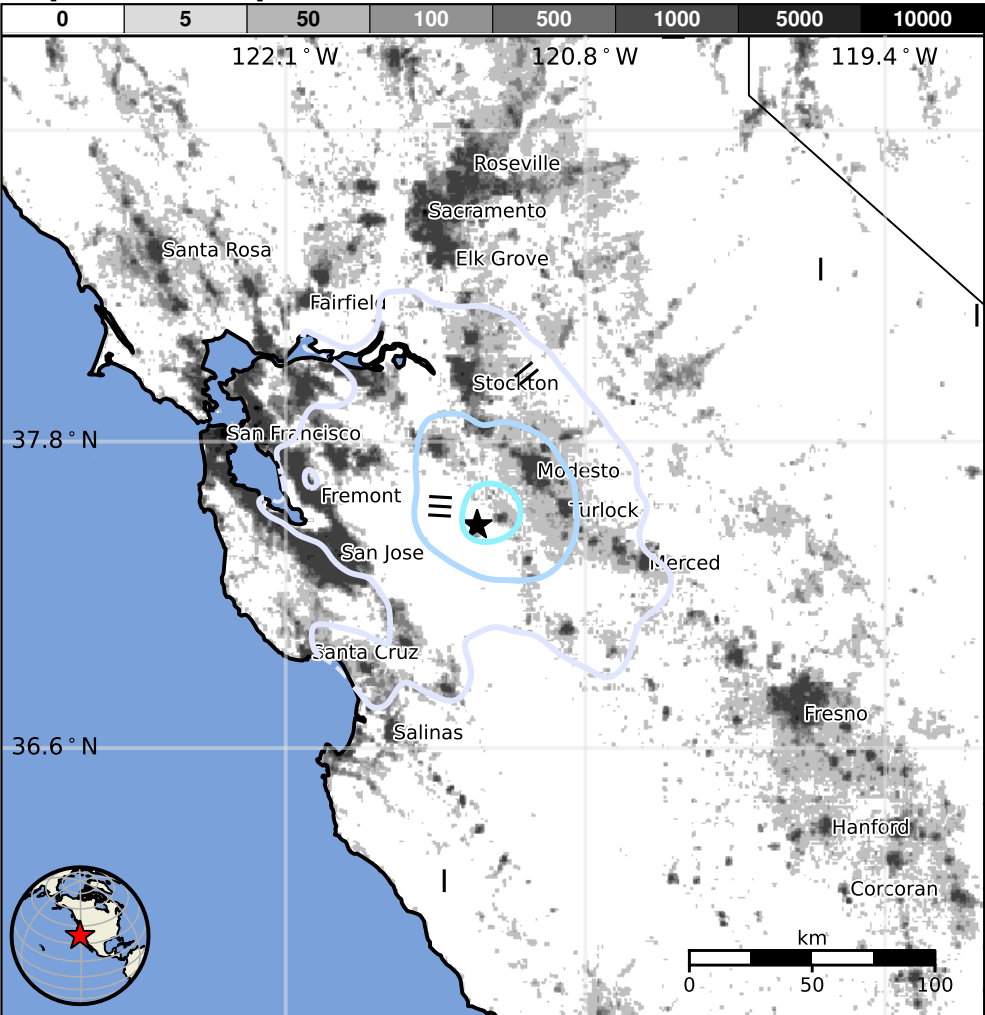


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		10,952k*	4,553k	27k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2003-12-22	203	6.6	VI(8k)	2
1980-01-24	51	5.8	VII(35k)	1
1989-10-18	59	6.9	VIII(109k)	62

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
IV	Patterson	20k
III	Riverdale Park	1k
III	West Modesto	6k
III	Bret Harte	5k
III	Shackelford	3k
III	Bystrom	4k
II	San Jose	946k
I	San Francisco	805k
I	Sacramento	466k
I	Carson City	55k
I	Fresno	495k